



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/665,608	09/19/2003	Anthanasios Angelopoulos	UTL 00120	6386
32968 7590 08/19/2008 KYOCERA WIRELESS CORP. P.O. BOX 928289 SAN DIEGO, CA 92192-8289				
EXAMINER				
WENDELL, ANDREW				
ART UNIT		PAPER NUMBER		
2618				
MAIL DATE		DELIVERY MODE		
08/19/2008		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/665,608

**Applicant(s)**

ANGELOPOULOS ET AL.

**Examiner**

ANDREW WENDELL

**Art Unit**

2618

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 09 April 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-5, 7-10, 12 and 13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5, 7-10, 12 and 13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/S5108)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-5, 7-10, and 12-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee et al. (US Pat Pub# 2004/0137944) in view of Harris et al. (US Pat Pub# 2004/0127233).

Regarding claim 1, Lee teaches a mobile communication device 102 (Figs. 1 and 5) capable of two-way radio communication having teletypewriter communication capability (Sections 0017, 0019-0020, 00222, 0025, and 0027-0028), the mobile communication device comprising a microprocessor 512 (Fig. 5) within the mobile communication device capable of converting between alphanumeric data and TTY formatted data (Section 0028, "Controller 512 executes the necessary TTY capture 526 and TTY mapping 528 routines"); memory 524, 536, 522, or 518 (Fig. 5) associated with the microprocessor 512 (Fig. 5); mobile user interface in communication with the microprocessor 106, 104, or 108 (Fig. 5); and conversion information stored in the memory for conversion between alphanumeric data and TTY formatted data (Sections 0022 and 0028). Lee fails to teach a tone detector.

Harris teaches a teletypewriter tone detector circuitry 224 (Fig. 2, Section 0074) for detecting TTY tone formatted data received by the mobile communication device (Fig. 2), the TTY tone detector in communication with the microprocessor 204 (Fig. 2).

Therefore, it would have been obvious at the time of the invention to one of ordinary skill in the art at the time the invention was made to incorporate a tone detector as taught by Harris into Lee's TTY device in order to increase usability for the user (Section 0004).

Regarding claim 2, the combination including Lee teaches a display 106 (Fig. 5) for the display of alphanumeric data to a user (Sections 0017, 0019-0020, 00222, 0025, and 0027-0028); and a user input mechanism 104 or 108 (Fig. 5).

Regarding claim 3, the combination including Lee teaches an encoder for encoding teletypewriter packet extension data to a signal for transmission from the mobile communication device, the encoder in communication with the microprocessor (Sections 0017, 0019-0020, 00222, 0025, and 0027-0028, pretty well known there is an encoder in order to communicate TTY data with another device).

Regarding claim 4, the combination including Lee teaches a decoder for decoding teletypewriter formatted data received by the mobile communication device the decoder in communication with the microprocessor (Sections 0017, 0019-0020, 00222, 0025, and 0027-0028, pretty well known there is a decoder in order to receive TTY data from another device).

Regarding claim 5, the combination including Harris teaches a TTY tone generator 222 (Fig. 2) for generating teletypewriter tone formatted data for

transmission from the mobile communication device, the TTY tone generator in communication with the microprocessor (Section 0074).

Regarding claim 7, method claim 7 is rejected for the same reason as apparatus claim 1 since the recited elements would perform the claimed steps.

Regarding claim 8, method claim 8 is rejected for the same reason as apparatus claim 2 since the recited elements would perform the claimed steps.

Regarding claim 9, the combination including Lee teaches in the microprocessor, converting TTY formatted data received by the mobile into alphanumeric data with the microprocessor (Section 0027-0028); and displaying the alphanumeric data on the display 106 (Fig. 5) of the mobile communication device (Sections 0017, 0019-0020, 00222, 0025, and 0027-0028).

Regarding claim 10, method claim 10 is rejected for the same reason as apparatus claim 4 since the recited elements would perform the claimed steps.

Regarding claim 12, method claim 12 is rejected for the same reason as apparatus claim 3 since the recited elements would perform the claimed steps.

Regarding claim 13, method claim 13 is rejected for the same reason as apparatus claim 5 since the recited elements would perform the claimed steps.

### ***Response to Arguments***

3. Applicant's arguments with respect to claims 1-5, 7-10, and 12-13 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ANDREW WENDELL whose telephone number is (571)272-0557. The examiner can normally be reached on 7:30-5 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay Maung can be reached on 571-272-7882. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Andrew Wendell/  
Examiner, Art Unit 2618

/Nay A. Maung/  
Supervisory Patent Examiner, Art  
Unit 2618

8/7/2008